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<u>CLAIMS</u>

What is claimed is:

1	1. A probe pin array, comprising:
2	a housing having a first surface and a second surface; and
3	a plurality of probe pins extending between said housing first surface and said
4	housing said second surface, wherein said plurality of probe pins extend substantially
5	perpendicularly from said housing second surface and wherein said plurality of probe
6	pins each further include a leading end having a taper between about 10 and 25 degrees

- 1 2. The probe pin array of claim 1, wherein said leading end taper is about 15 degrees.
 - 3. The probe pin array of claim 1, wherein said plurality of probe pins each comprise steel coated with gold.
- 1 4. The probe pin array of claim 3, wherein said plurality of probe pins each
 2 has a diameter of between about 30% and 60% of a diameter of a pin of a pin grid array
 3 microelectronic device to be inserted into a socket to be tested by said plurality of probe
 4 pins.

- 1 5. The probe pin array of claim 1, further including an alignment guide
- 2 having a chamfered surface with an angle of between about 45 and 70 degrees from
- 3 planar with said housing second surface.
- 1 6. The probe pin array of claim 5, wherein said chamfered surface has an
- 2 angle of about 60 degrees from planar with said housing second surface.
- 1 7. A probe pin array, comprising:
- a housing having a first surface and a second surface;
- a plurality of probe pins extending between said housing first surface and said
- 4 housing said second surface, wherein said plurality of probe pins extend substantially
- 5 perpendicularly from said housing second surface; and
- at least one alignment guide extending from said housing second surface having at
- 7 least one chamfered surface oriented toward said plurality of probe pins.
- 1 8. The probe pin array of claim 7, wherein said plurality of probe pins each
- 2 further include a leading end having a taper between about 10 and 25 degrees.
- 1 9. The probe pin array of claim 8, wherein said leading end taper is about 15
- degrees.

1	10. The probe pin array of claim 7, wherein said plurality of probe pins each
2	comprise steel coated with gold.
1	11. The probe pin array of claim 10, wherein said plurality of probe pins each
2	has a diameter of between about 30% and 60% of a diameter of a pin of a pin grid array
3	microelectronic device to be inserted into a socket to be tested by said plurality of probe
4	pins.
1	12. The probe pin array of claim 7, wherein said alignment guide chamfered
2	surface has an angle of between about 45 and 70 degrees from planar with said housing
3	second surface.
1	13. The probe pin array of claim 12, wherein said chamfered surface has an
2	angle of about 60 degrees from planar with said housing second surface.

- 1 14. A probe pin array, comprising:
- 2 a housing having a first surface and a second surface;
- a carrier having a first surface and a second surface, wherein said carrier second
- 4 surface abuts said housing first surface;
- a plurality of probe pins extending between said carrier first surface and said
- 6 housing said second surface and extending between said housing first surface and said

- 7 housing said second surface, wherein said plurality of probe pins extend substantially
- 8 perpendicularly from said housing second surface; and
- 9 at least one alignment guide extending from said housing second surface having at
- least one chamfered surface oriented toward said plurality of probe pins.
- 1 15. The probe pin array of claim 14, wherein said plurality of probe pins each
- 2 further include a leading end having a taper between about 10 and 25 degrees.
- 1 16. The probe pin array of claim 15, wherein said leading end taper is about
- 2 15 degrees.
- 1 The probe pin array of claim 14, wherein said plurality of probe pins each
- 2 comprise steel coated with gold.
- 1 18. The probe pin array of claim 17, wherein said plurality of probe pins each
- 2 has a diameter of between about 30% and 60% of a diameter of a pin of a pin grid array
- 3 microelectronic device to be inserted into a socket to be tested by said plurality of probe
- 4 pins.
- 1 19. The probe pin array of claim 14, wherein said alignment guide chamfered
- 2 surface has an angle of between about 45 and 70 degrees from planar with said housing
- 3 second surface.

- 1 20. The probe pin array of claim 13, wherein said chamfered surface has an
- 2 angle of about 60 degrees from planar with said housing second surface.